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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|------------------------|-------------------------|------------------|
| 09/423,525 | 11/10/1999 | BODIL ENGBERG PALLESEN | PATRADE | 6840 |
| 75 | 590 07/09/2003 | | | |
| JAMES C WRAY | | | EXAMINER | |
| 1493 CHAIN BRIDGE ROAD SUITE 300 MCLEAN, VA 22101 | | | YAO, SAMCHUAN CUA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1733 | 17 |
| | | | DATE MAILED: 07/09/2003 | <i>v</i> / |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | |
|--|---|--|--|--|--|--|--|
| Office Action Summary | | 09/423,525 | PALLESEN, BODIL ENGBERG | | | | |
| | | Examiner | Art Unit | | | | |
| | | Sam Chuan C. Yao | 1733 | | | | |
| Period fo | Th MAILING DATE of this communication app ars on the cover sheet with the correspond nce address Period for Reply | | | | | | |
| THE I - Exter after - If the - If NO - Failu - Any r | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing indicated patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D. (35.U.S.C. 8.133) | | | | |
| 1)🛛 | Responsive to communication(s) filed on 12 J | <u>lune 2003</u> . | | | | | |
| 2a)⊠ | This action is FINAL . 2b) Thi | is action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| | on of Claims | | | | | | |
| | Claim(s) <u>12-35</u> is/are pending in the applicatio | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | | |
| | 6)⊠ Claim(s) <u>12-35</u> is/are rejected. | | | | | | |
| | Claim(s) is/are objected to. | | | | | | |
| | Claim(s) are subject to restriction and/or on Papers | election requirement. | | | | | |
| | The specification is objected to by the Examiner | | | | | | |
| | | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | | |
| | nder 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| | a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| | 1. Certified copies of the priority documents | have been received. | | | | | |
| | 2. Certified copies of the priority documents | | on No | | | | |
| Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | cknowledgment is made of a claim for domestic | | | | | | |
| _ a) | ☐ The translation of the foreign language provicknowledgment is made of a claim for domestic | visional application has been rece | eived. | | | | |
| Attachment(| | | · · · · · · · · · · · · · · · · · · · | | | | |
| 2) 🔲 Notice | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal P | (PTO-413) Paper No(s) atent Application (PTO-152) | | | | |
| 6. Patent and Tra | demark Office | | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 12-28 and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke (US 4,404,250) in view of Young (US 1,146,987) for reasons of record set forth in Paper No. 14 numbered paragraph 2.
- 3. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in numbered paragraph 2 as applied to claim 12 above, and further in view of either Gould et al (US 4,997,488) or Mita et al (US 4,851,082) for reasons of record set forth in Paper No. 14 numbered paragraph 3.
- 4. Claims 12-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (US 1,146,987) in view of any one of Desverschere (US 4,106,163), Clarke (US 4,404,250), WO 98/01611, and Garrett (US 5,021,529) for reasons of record set forth in Paper No. 14 numbered paragraph 3.

Response to Arguments

5. Applicant's arguments filed on 06-12-03 have been fully considered but they are not persuasive.

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Counsel argues on page 2 full paragraph 1 that there is nothing in the combination of references which disclose the recited method steps in claim 12. Examiner strongly disagrees. It is suggested for Counsel to particular point out which particular process limitation is not taught by the collective teachings of Clarke and Young. As for Counsel's arguments regarding Clarke and Young on the bottom of page 2 to page 3 line 5. Examiner respectfully disagrees with Counsel's assertion that there is no motivation to combine the two references. As noted in the prior office, Clarke discloses a process of making a consolidated fiber mat, the process comprises pre-treating a cellulose plant such as a straw, grass, bagasse, etc., using a hammer-mill or a disk refiner, to disintegrate (i.e. shorten and separate) the cellulose plant into a fibrous mass; admixing about 20-35% by weight of an organic thermosetting binder material to the fibrous mass; air-laying the fibrous mass onto a web-forming surface to form a randomly oriented fiber web; and, then heat-pressing the fiber-web to form a non-woven composite mat having inter-fiber bonds; wherein the fibers have an average length of .5-2.5 mm, and the composite mat has a thickness in the range of about .25-2.25 mm (col. 2 lines 11-55; col. 3 line 54 to col. 4 line 28; claims 1 and 8). Clarke further discloses subjecting the cellulose material to a bale-breaker before performing the disintegration process, if the cellulose material is in a bulk form (col. 4 lines 28-31). It is conventional in the art to perform the recited process steps a) and b) in

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order to remove unwanted materials from the plant stems and to also softened the plants so that fibrous components in plant stems can readily be shortened and separated during a defibering/refining operation as exemplified in the teachings of Young (page 1 lines 98-112 to page 2 line 26; page 2 lines 51-94; page 3 lines 44-56). It is acknowledge that, Young is directed a conventional treatment of a hemp (a particular type of grassy material) so that the hemp can readily be defiberized. It is respectfully submitted that, one in the art wanting to treat a cellulosic plant such as a grass taught by Clarke to soften the cellulosic plant so that it can effectively be disintegrated would have applied known effective methods such as the one taught by Young. Note further that: it is a common practice in the art of making fiberboards to interchangeably use various non-woody cellulose plants materials such as grass, straw. bagasse, hemp, flax, rice or wheat stalk, etc. (see references cited on page 4 for details).

Counsel once again reiterated his prior argument on page 3 2nd full paragraph that "[t]here is a disconnect between the combined teachings ...". Examiner strongly disagrees. There is no disconnect between combined references applied in the prior office action. The secondary references were used as evidence to show that the recited process steps (i.e. threshing and retting) to soften cellulosic plants are conventional in the art. In fact, a plant treatment process which comprises harvesting,

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threshing, retting, and then defiberizing is a very old technique in the art. It is respectfully submitted that, one in the art, motivated by the desire to soften cellulosic plants so that the plants can readily be defiberized by hammermilling or disk-refining as suggested by Clarke, would have amply been motivated to incorporate the teachings of Young.

In response to Counsel's arguments regarding Young on page 4, Examiner agrees with Counsel that Young is not directed to making a fiber mat. However, is Counsel suggesting that, a resultant defiberized hemp is a stand alone product? In other words, is Counsel suggesting that the defiberized hemp in Young is not going to be used as a feed material in making various fibrous articles? If so, what is the purpose of defiberizing hemps, if not, to use resultant hemp fibers in forming various fibrous articles such as fiber web, paper, board, yarn, etc.? In any event, as noted above, it would have been obvious in the art to use the resultant defiberized hemp in Young for making fiber webs/mats.

As for Counsel's argument on page 4 regarding providing "numerous references to substantiate" Examiner's assertion that the claimed features are conventional, Counsel's attention is directed to the references set forth in numbered paragraph 4 above and the following references:

Good et al (US 5,656,129; abstract; col. 6 lines 58-67); Knudsen et al (US 4,913,773; abstract; col. 2 lines 17-29); Chow (US 3,927,235; abstract;

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col. 1 line 51 to col. 2 line 11); and, Diehr et al (US 3,870,665; abstract; col. 4 lines 43-68).

In response to Counsel's argument on page 5 last full paragraph, it is again suggested for Counsel to particularly cite a limitation or limitations not disclosed by the collective references applied in numbered paragraph 2 or 3 above.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Friday with second Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7115 for regular communications and (703) 305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Sam Chuan C. Yao Primary Examiner Art Unit 1733

scy July 3, 2003